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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/554,025 06/15/00 DORR

C TRW(EHR4846

EXAMINER

PM82/0802

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GARCIA, F

ART UNIT

PAPER NUMBER

3629

DATE MAILED:

08/02/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/554,025

Applicant(s)

DORR, CHRISTOPH

Examiner

Ernesto Garcia

Art Unit

3629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2000.
- 2a) ☐ This action is FINAL.
- 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the area" and "the opening" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the cylindrical center part" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 6 recites the limitation "the area" and "the ball equator"" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the indentation" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 5, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Pazdirek et al., 5,609,433.

Regarding claim 1, as best understood, Pazdirek discloses in Figure 2 a ball-and-socket joint **14** having a joint pin **20**, a plastic joint housing **12**, a bearing shell **36**, and a metal ring **26**. The joint pin **20** is provided with a joint ball **22**. The bearing shell **36** is inserted into the plastic joint housing **12**. The metal ring **26** is embedded in the joint housing **12**, and the metal ring **26** has a radially inwardly bent end segment **32** (Fig. 3) located in an area of an opening **O** in the joint housing **12**.

Regarding claim 4, an inside diameter of a cylindrical center part **28** (Fig. 3) of the metal ring **26** approximately corresponds to an outside diameter of the bearing shell **36**.

Regarding claim 5, the cylindrical center part **28** of the metal ring **26** ends approximately in an area of a ball equator of the joint housing **12**.

Regarding claim 9, Pazdirek discloses the joint housing **12**, in the are of the opening **O**, is provided with a ring groove **P**.

Regarding claim 10, Pazdirek discloses the joint housing **12** integral with a chassis strut **E**, and made of plastic (col. 4, lines 24-33). Applicant is reminded that the method of forming the device by injection molding is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergstrom, 3,650,004.

Regarding claim 1, as best understood, Bergstrom discloses in Figure 1 a ball-and-socket joint having a joint pin **100**, a plastic joint housing **5**, a bearing shell **18**, and a metal ring **6**. The joint pin **100** is provided with a joint ball **2**. The bearing shell **18** is inserted into the plastic joint housing **5**. The metal ring **6** is embedded in the joint housing **5**, and the metal ring **6** has a radially inwardly bent end segment **200** located in an area of an opening in the joint housing **5**.

Regarding claim 2, the metal ring 6 has an end provided with a radially outwardly angled flange 300. The metal ring 6 has an end extrusion-coated with a material of the joint housing 5.

Regarding claim 3, the flange 300 protrudes at an approximately 90 degrees angle from a cylindrical center part of the metal ring 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pazdirek et al, 5,609,433 in view of Morin, 4,318,627.

Regarding claim 6, as best understood, Pazdirek et al. fails to disclose the bearing shell 39, in a pin-side area, provided with slits reaching up to an area of a ball equator. Morin disclose in Figure 4 a bearing shell 30, in a pin-side area, provided with slits 34 reaching up to an area of a ball equator x (Fig. 1). Morin teaches the bearing shell with slits 34 to ensure preloading and automatic taking up of play between a ball

and an annular flange (the ring; see abstract). Therefore, as taught by Morin, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include slits on a shell to ensure preloading and automatic taking up of play between a ball and an annular flange.

Regarding claim 7, Morin teaches in Figure 2 the bearing shell **14**, in a head-side area facing away from the joint pin **23**, is provided with indentations **32** (Fig. 4) extending parallel to a joint axis **L**.

Regarding claim 8, as best understood, Morin teaches in Figure 4 the slits **34** and indentations **32** are mutually offset in a circumferential direction. The slits **34** and indentation **32** are formed in the bearing shell **14**.

Conclusion


The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dorr et al. and Wood show a similar ball-and-socket joint.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 703-308-8606. The examiner can normally be reached on 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on 703-308-1159. The fax number for the organization where this application or proceeding is assigned is 703-305-3597 for regular communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2168.


Lynne H. Browne
Supervisory Patent Examiner
Technology Center 3620

E.G.

July 30, 2001